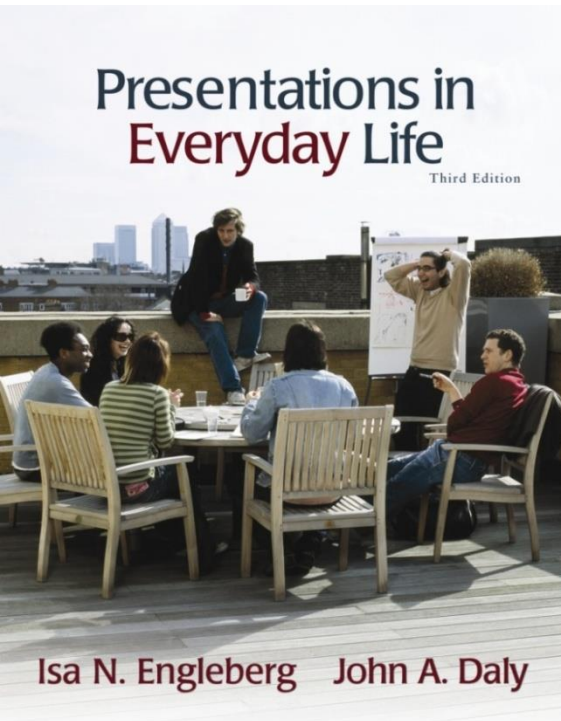


Chapter 8: Research and Supporting Material



This multimedia product and its contents are protected under copyright law. The following are prohibited by law:

- any public performance or display, including transmission of any image over a network;
- preparation of any derivative work, including the extraction, in whole or in part, of any images;
- any rental, lease, or lending of the program.

Chapter 8: Research and Supporting Material



Support Your Content
Research Your Content
Document Your Content

Types of Supporting Material

- Facts
- Statistics
- Testimony
- Definitions
- Analogies
- Descriptions
- Examples
- Stories
- Audio and Visual Aids

Facts

- A fact is a verifiable observation, experience, or event known to be true.
- Most presentations regardless of their purpose are supported by facts
- Sometimes a little known fact can spark audience interest.



Statistics

- A type of mathematics concerned with collecting, summarizing, analyzing, and interpreting data
- Most effective to draw conclusions from a set of data



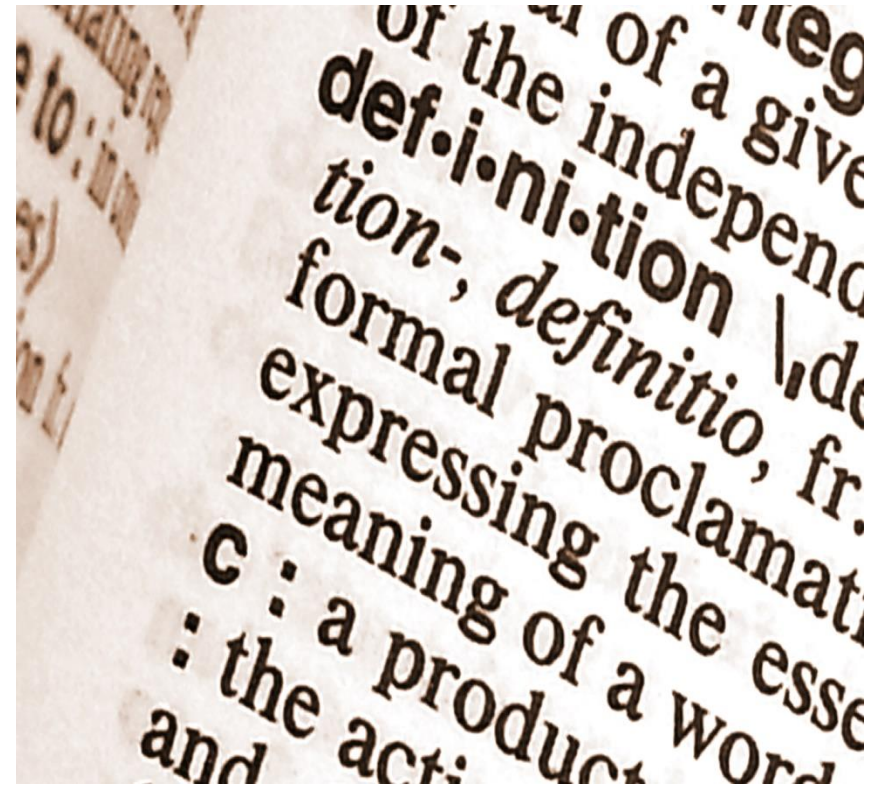
Testimony

- Refers to statements or opinions that someone has said or written
- Quoting real people-politicians, scientists, celebrities, experts adds dimension to the presentations



Definitions

- Explains or clarifies the meaning of a word, phrase, or concept
- Using definitions when the presentation includes words or ideas that the audience may not know or misunderstand



Analogies

- Analogies identify similarities in things that are alike or identify similarities in things that are not alike
- “ a leaders is like a shepherd. He stays behind the flock, letting the most nimble go out ahead, whereupon the others follow, not realizing that all along they are being directed from behind”

Descriptions

- Helps create a mental image of a scene, a concept, an event, and object, or a person
- Descriptions provide more details than definitions by offering causes, effects, historical background, characteristics, etc.



Examples

- Provides a reference to a specific case or instance in order to make an abstract idea more concrete
- Choosing examples carefully a presentation can be customized to a specific audience



Stories

- Accounts or reports about something that has happened
- Stories, should be interesting, but most importantly clearly reinforce the point of the presentation



Back to Statistics

- Descriptive Statistics

- Descriptive statistics is the term given to the analysis of data that helps describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data.
- Descriptive statistics do not, however, allow us to make conclusions beyond the data we have analyzed or reach conclusions regarding any hypotheses we might have made. They are simply a way to describe our data.

- Inferential Statistics

- Inferential statistics makes inferences and predictions about data based on a **sample** of data taken from the population in question.
- dealing with conclusions, generalizations, predictions, and estimations based on data from samples.

Mean, Mode, Median

- *mean*: regular *meaning* of "average" median: middle value. mode: most often. (In the above, I've used the term "average" rather casually.
- Mean (average) - The technical *definition* of "average" is the arithmetic *mean*: adding up the values and then dividing by the number of values.
- Mode – refers to the number that comes up more often
- Median – the figure that is in the middle between two extremes

Matching Question

- A. Fact
 - B. Statistic
 - C. Testimony
 - D. Definition
 - E. Example
- ___ According to Dr. Alan Hirsch, about 90% of taste is based on smell.
- ___ “Our intelligence sources tell us that Saddam Hussein has attempted to purchase high strength aluminum tubes suitable for nuclear weapons production.”
- George W. Bush, 1/28/03

Visual Representations of Data

- **Informational Graphics** are visual displays that can be anything from a pleasing arrangement of facts and figures in a table to a complex, animated interactive diagram with accompanying text and audio that help explain a story's meaning.
- Examples include:
 - tables with facts
 - bar charts or pie charts with statistics
 - maps or diagrams providing information

Statistical Infographics

- The two main types of statistical infographic elements are **charts (also called graphs) and data maps.**
- **Charts (graphs) were invented to display numerical information concisely and comprehensibly and to show trends visually.**
 - Line, relational, pie, and pictograph are the primary examples of charts, but other variations include bubble, doughnut, radar, surface, and scatter plots.
- **Data maps usually combine numeric data and locations within a simple locator map to form a powerful story-telling combination.**

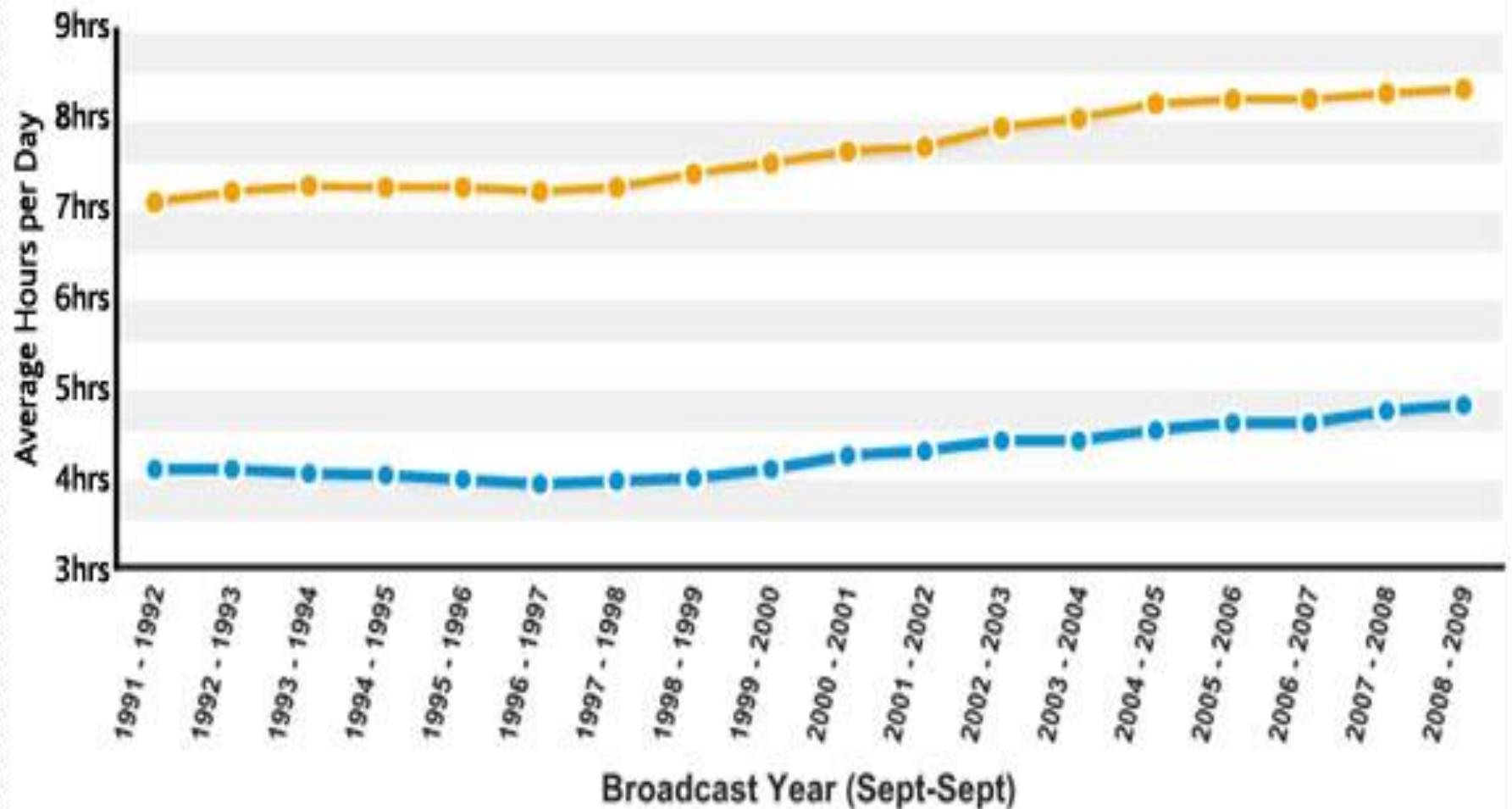
line charts

- A *line chart* contains a rule that connects points plotted on a grid that correspond to amounts along a horizontal, or x-axis and a vertical, or y-axis. **Designers often use line charts to show variations in quantities over a period of time.**

Average TV Viewing Per Day

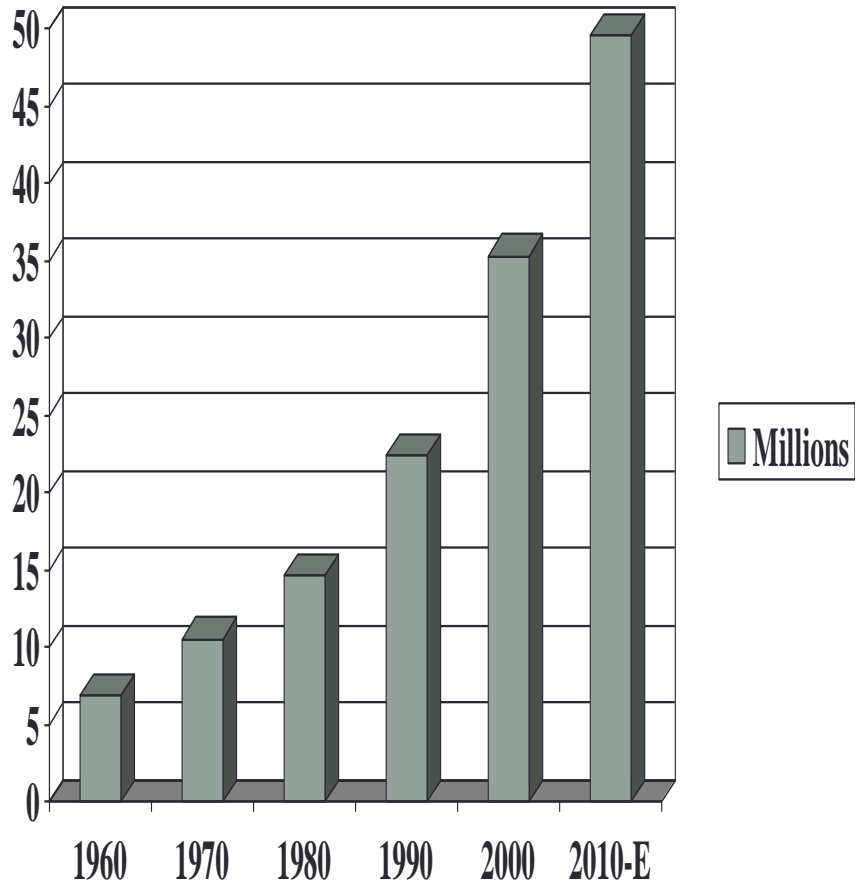
Source: The Nielsen Company

- Household
- Persons 2+



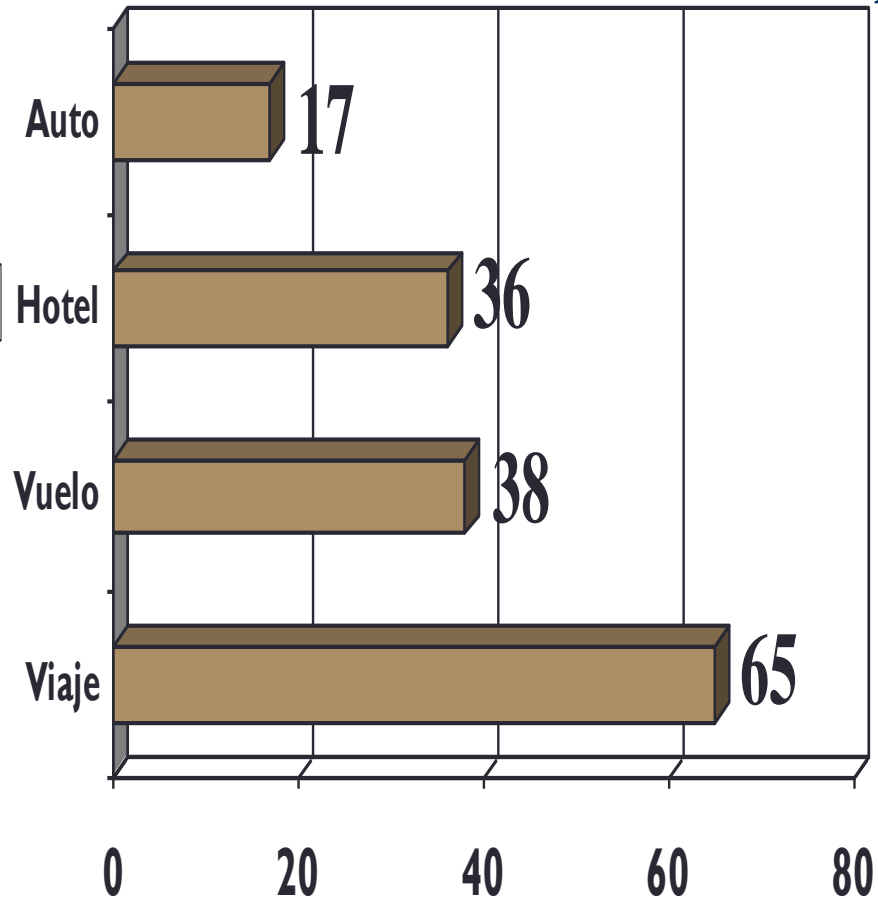
Bar Charts

- In contrast to line charts, which best show broadly based trends over time, **bar charts show significant changes in two or more specific items during a particular time period.**
- For example, two bars of different heights would best represent gold and silver prices for a particular year.



Growth of U.S. Hispanic Market

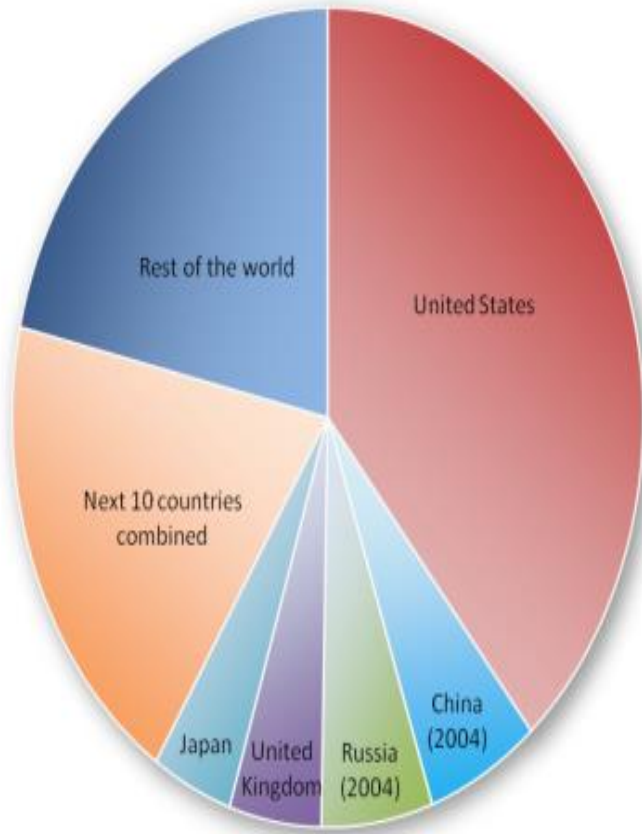
Percent of Hispanics Who Use the Internet to Plan Their Trips



pie charts

- ***A pie chart compares amounts individually and for the whole.***
- The only way that pie charts can be used to show complex trends is to use several pie charts, which isn't effective.
 - A pie chart should have no more than five slices and no slice should be smaller than one percent of the total.

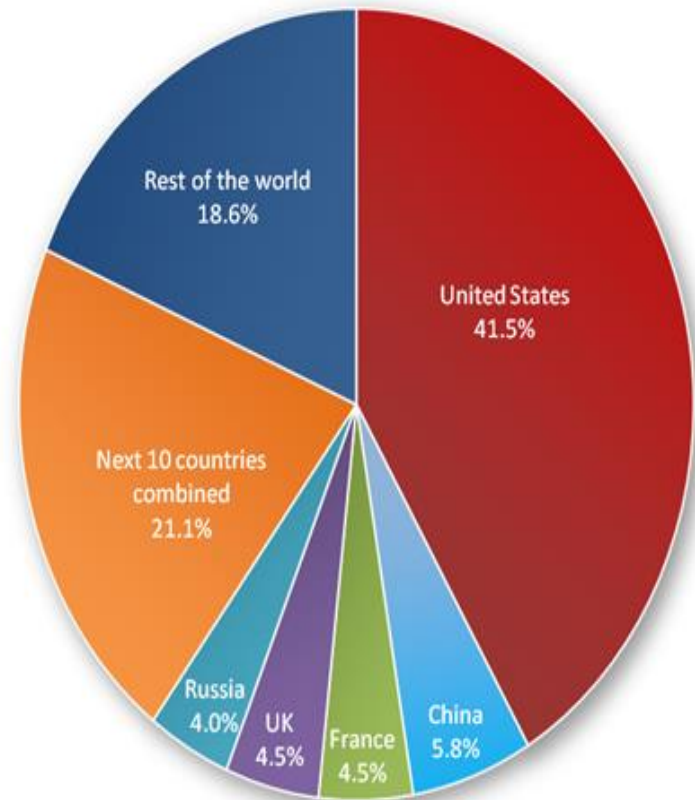
Global Distribution of Military Expenditure in 2005



Source: Center for Arms Control and Non-Proliferation, 2007

www.globalissues.org

Global Distribution of Military Expenditure in 2008



Source: Stockholm International Peace Research Institute Yearbook 2009

non-statistical/statistical

- *Tables*
- If you simply want to display numbers or words, a table puts them in an orderly format of rows and columns, with enough white space for readability.
- The most familiar types of tables in print media are stock market results for the day and baseball box scores after the game.

Global Gap Index 2006: Results in Latin America

Global Rankings

Country	Overall Ranking	Economic participation and opportunity	Educational attainment ranking	Health and survival ranking	Political empowerment ranking
Colombia	22	39	14	1	27
Costa Rica	30	89	32	1	15
Panama	31	44	35	47	35
El Salvador	39	73	58	1	24
Argentina	41	82	28	1	23
Venezuela	57	66	61	71	57
Dominican Republic	59	78	1	1	49
Peru	60	86	70	58	31
Nicaragua	62	101	39	50	25
Paraguay	64	80	82	1	38
Brazil	67	63	72	1	86
Honduras	74	99	1	1	42
Mexico	75	98	44	1	45
Chile	78	90	68	1	56
Ecuador	82	92	38	1	64
Bolivia	87	77	89	79	71
Guatemala	95	104	91	1	54
<i>United States</i>	23	3	66	1	66

A total of 115 countries were evaluated for this report.

Matching Question

- A. Fact
 - B. Definition
 - C. Description
 - D. Example
 - E. Story
- ___ Statistics are a type of mathematics concerned with collecting, summarizing, and analyzing data.
- ___ Supporting material includes facts, testimony, analogies, and stories.
- ___ A teacher in [my] nephew's school was fired for wearing a T-shirt with a peace sign on it.

Fact, Inference, or Opinion?

- The Second Amendment to the Constitution protects your right to own a gun.
- “We do not consecrate the flag by punishing its desecration, for in doing so we dilute the freedom that this cherished emblem represents.” [*Supreme Court decision*]
- “. . . 47% of violent interactions on television show no harm to victims, and 58% show no pain.” [*The National Television Violence Study, 1994-1995: Summary, 1996.*]

Identify the Supporting Material

Right after the Civil War, six former Confederate soldiers in Tennessee created a circle of like-minded friends. They chose the name Kuklux, a variation of the Greek word *kuklos*, which means circle. They added the term Klan because they were of Scotch-Irish decent. Woodrow Wilson, who would later become president of the United States declared “At last there has sprung into existence a great Ku Klux Klan, a veritable empire of the south to protect the Southern Country.” By the 1920s, the Klan claimed eight million members, including President Warren G. Harding.

Source: Levitt and Dubner, *Freakonomics*, (NY: William Morrow) 2005, p. 55-56.

Fill in the Blanks

Facts	Inferences	Opinions
Require direct observation	Can be made at any time	
Stick with what is observed		Go beyond what is observed
Are objective	Are interpretations of fact	
Seek truth	Claim probability	

Tests of Supporting Material

- Is the source **identified, credible**, and **unbiased**?
- Is the information **recent**?
- Is the information **consistent** with other information on the same subject?
- Is the information **relevant** to the topic?
- Is the statistical method **valid**?

Just Say “No” to Bad Research

- Several studies claim that abstinence-only programs reduce early sexual activity.
- Many of these studies only surveyed youngsters who took the virginity pledge.
- Are kids who choose to take the pledge representative of most young people?

[Sharon Begley, Just Say No—To Bad Science, *The Week*, May 7, 2007, p. 57.]

Test the Supporting Material

- Credible source?
 - Recent?
 - Consistent?
 - Relevant?
 - Valid statistics?
- ✓ People should be allowed to carry guns. A woman in New York was shot and killed by her estranged husband after police took away her guns.
 - ✓ A Gallup Poll showed that 74% of men and 80% of women favor legislation banning semiautomatic assault weapons.

Test the Supporting Material

- Credible source?
 - Recent?
 - Consistent?
 - Relevant?
 - Valid statistics?
- ✓ Affirmative action reinforced a self-defeating sense of victimization among blacks. [James L. Robinson, *Racism or Attitude*, 1995]
 - ✓ The University of California, Berkeley forecasts a two-thirds drop in black enrollment if affirmative action were ended.

Test the Supporting Material

- Credible source? ✓ Of the women who feel they have been sexually harassed at work, 15% leave their jobs. [*The Freeman*, August 1996]
- Recent?
- Consistent?
- Relevant?
- Valid statistics? ✓ Supervisors are using sexual harassment claims as an excuse to fire unpopular employees. [*The Washington Post*, January 27, 1997]

Don't Take It Out of Context

On January 18, 2008 Bill Clinton told a crowd in Nevada that [Obama] said that “since 1992, the Republicans have had all the good ideas.”

Later Hillary Clinton criticizing Obama for saying that Republicans had better ideas than Democrats and that she didn't consider it a better idea to privatize Social Security, eliminate the minimum wage, undercut health benefits, or drive the country into debt.

Was it Out of Context? continued

Here's what Obama actually said in the interview with the editors of the *Reno Gazette-Journal* :

“ . . . the Republican approach has played itself out. I think it's fair to say the Republicans were the party of ideas for a pretty long chunk of time there over the last 10, 15 years, in the sense that they were challenging conventional wisdom.”

Evaluate *Wikipedia*

Advantages

- It's fast, convenient, and easy to use.

- _____

- _____

Disadvantages

- Instructors disapprove of using it as a source.

- _____

- _____

Short Answer Questions

1. What do you need to know in advance before conducting an interview?
2. How can you get an interview off to a good start?
3. How do you keep an interview running smoothly?

Plagiarism

- Plagiarism comes from the Latin term, *plagiu*, which means to “kidnap.”
- **Plagiarism:** To use or pass off the idea or writing of another; to appropriate for use as one’s own passages or ideas from another.

True or False: Is It Plagiarism?

___ Using word-for-word passages written by someone else without giving the writer credit.

___ Taking passages written by someone else but rewording them to sound more like you without giving the writer credit.

___ Using the key points in an article written by someone else as your key points.

___ Using sections from another student's paper or presentation found on the Internet as your own.